

Portland Public School District Ubiquitous Computing Project

Application for EDU2011 pilot program: Applicant Wireless Program (refer to WC Docket No. 10-222. § Electronic Filers).

Full description of the current or planned Applicant Wireless Program, including but not limited to:

Portland Public Schools is endeavoring to move to the next step of our school to home / 21st Century Learning program by implementing a ubiquitous computing / learning environment. This program has the following tenets:

- Partnering with Sprint, provide all students 6th – 12th grade, mobile internet-connected computing devices for use both in the classroom and at home.
- Train teachers using 21st century education design and best practices to transition from classroom-based education to just-in-time / anywhere education including:
 - Electronic textbooks, Internet resources, online classrooms, podcasts, social media, etc.
 - Synchronous and asynchronous messaging/communication (24/7 availability) to increase communication between staff and students/parents/community (e.g. Twitter, instant messaging)
 - Web design to enable “Classroom in the Cloud” using our existing Web software powered by SchoolInSites and other sources including our free access to Moodle through Kent Intermediate School District.
 - Access to resources any time / anywhere via the Internet including, Discovery United Streaming educational video streaming service which we belong to.
- Train students in 21st century best practices for life long learning including:
 - The use of existing media for learning including social media, music, video, etc.
 - Allow students to communicate with staff 24/7 (staff are encouraged to respond as they are able).
 - Allow opportunities for students to complete in-class assignments, take tests, read notes online.
 - Using critical thinking to discern the validity of online sources of knowledge as well as using online tools such as Diigo bookmarking to save, organized, and share that knowledge.
- Partner with GoKnow educational software staff to provide training for both staff and students.

Steps / Impediments to Implementation

Site surveys and anecdotal evidence suggest that the geographical area covering Portland Public School District is within known cellular carriers region (We are partnering with Sprint). That information suggests that students within the boundary of the Portland Public School District would have Internet access using cellular carrier-based computing devices.

Further, Portland Public School District is investing in wireless access points to cover areas within the school buildings.

Finally Portland Public School District partners with the City of Portland and has access to various facilities including: City-wide fiber optic cable and water towers as needed.

Training

Currently, Portland Public School District training for staff has been complimentary to the tenets noted above: moving from classroom-based education to just-in-time / anywhere education. Additional training would be necessary however. Implementing any new technology requires training to assure program success. Staff would receive training both in the technology as well as in best practices for using the new technology in educating students and parents.

Students would also receive extensive and ongoing training in the use of the hardware/software as well as using the technology in the classroom as well as using the technology for life long learning.

Parents would receive training in both how to help their student succeed in the 21st century (ongoing District mission) as well as how to help their student make the best use of the technology as a life long learner.

The extent to which the Applicant Wireless Program is integrated with federal, Tribal, state, regional or local governmental or non-profit initiatives to achieve educational or community access outcomes.

Portland Public School District uses and will continue to use Federal and State grants to provide training and ongoing support. The Portland Public School District also partners with the community and local non-profit groups as needed for both support as well as communication on efficacy of efforts. Portland Public School District Technology Committee and School Improvement Team have Community members who provide invaluable insight into projects.

Demographics

The poverty level based on the percentage of students eligible for a free or reduced price lunch under the national school lunch program (NSLP) or a federally approved alternative mechanism is **32%**, and the current discount rate of the school or library for 2010 = **62%** for our rural school district.

Financial Need

Our SLD discount rate is 62% and we take full advantage of those funds. However, the Portland Public School District technology budget has been cut by at least 10% each year for the last five. Even so, the administration has been committed to replacing aging technology. The problem is that we have, as a part of budget cuts, lengthened the time between upgrades / technology replacements. Our current schedule is at 8 years. We are able to do a great deal with this aging technology and get everything we can from it to the extent that when we eventually offer them to the community, we receive little response.

We are committed to student success. With a program like this, which is more sustainable, due to lower cost computing devices, we expect that we can continue to meet educational and student needs for the foreseeable future. We only need the initial grant funds to get started.

Expected Costs*

We expect the cost structure to be such:

*Per Year Cost x 1200 computing devices.

Computing Devices: Dell 11Z @ \$149.00:	\$178,800.00***
Internet Access / Contract: \$516.00 (erate eligible):	\$928,800.00**
GoKnow Educational Software: \$60.00:	\$72,000.00
Barracuda Networks CIPA Compliance Software:	\$50,000.00
Implementation:	\$24,000.00
Training:	\$50,000.00
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Total:	\$1,375,600.00
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**Three Year Cost

***This amount will provide the District with at least 5 years of computer service.

Expected District Resources

The District will commit resources in people, time, and budget. Portland Public School District will have administrators, building representatives, teachers, parents, and community members work to implement and provide training for the computing devices and curriculum support.

Portland Public School District is committed to making this project sustainable as well as maintaining warranties, both basic replacement and repair and ongoing training. Portland Public School District will allocate funds from its general budget as well as technology budget for initial, ongoing, and long term sustainability.

Portland Public School District is also planning on replacing all teacher computers this summer to prepare for the program.

Anticipated Effect of EDU2011 Project

We expect the effect of the project to be transformative. We expect that we will see increased use of online resources resulting in more effective instruction, and in turn, more effective responses to educational needs as demonstrated in standardized tests such as the MEAP and MME. Specifically, we expect to see:

- Increased student test and assignment scores as measured by both summative (MEAP, MME, District common assessments) and formative (web-based, paper-based, classroom response system) assessments.
- Increased use of technology for presentations, data gathering / use, and access to educational resources.
- Increased use and activity of online classroom groups via the use of such resources as Skype, Wikis, Blogs, etc.
- Higher scores and deeper content in written assignments due to greater access to information via the Internet and Internet-based resources.
- Increased student class participation and reporting of student engagement including high class attendance.
- Increased inter- and intra- grade level / subject area staff collaboration.

Analysis of the cost-effectiveness of the current or planned Applicant Wireless Program

As noted above, the existing educational technology model under current funding realities is unsustainable. The EDU2011 project allows Portland Public School District to start fresh and create a model that can be sustained. If a mobile computing device can be purchased at 1/3rd the cost of a desktop computer and replaced for the same, one can see the efficacy of such a device. Given our current sustainability plan of purchasing 100 computers per year at \$1,000.00 each, we can now purchase 300 computing devices at \$300.00 (approx.) each per year allowing us to replace every 3 years at the same cost or under a typical replacement schedule of five years at half the cost.

Further, the current model of a few computers in each classroom supported by a single computer lab, fails to truly meet the needs of a 21st century learners. This models limits access whereas mobile computing devices allow learners anytime access to lifelong learning.

A statement of long-term objectives for the Program

Portland Public School District is committed to its students, parents, teachers, and community to sustaining our implementation of the EDU2011 program with funding, personnel, training, and professional development.

Children's Internet Protection Act and measures to protect against waste, fraud, and abuse

Portland Public School District is currently CIPA compliant and plans to extend the use of our internet filter, Untangle, to computing devices that leave the District network by purchasing additional licenses. If we experience any problems (their system is untested), we will implement Barracuda Networks CIPA filter, for the cost noted above, which is tested for mobile computing devices.

Portland Public School District conducts all financial procedures in accordance with State and Federal guidelines and submits to yearly audits having a long standing record of clean reports and financial security.

Internal policies and enforcement procedures governing acceptable use of the wireless devices used in the Program off the school or library's premises.

The Portland Public School District Acceptable Use Policy governing all computing devices and technologies is online and available for review at:

<http://ppstechplan.wetpaint.com/page/Acceptable+Use+Policy>

Also attached.

Required Information

Portland Public Schools
1100 Ionia Road
Portland, MI 48875

David Palme
Director of Technology
dpalme@portlandk12.org
517-647-2311

Schools to be served:

Portland Middle School
745 Storz Avenue
Portland, MI 48875
517-647-2985
Billed Entity Number: 06310

Portland High School
1100 Ionia Road
Portland, MI 48875
517-647-2981
Billed Entity Number: 03098

Portland Public School District is a rural public Pre k -12 district of 2100 students. Portland Public School District is located in Mid Michigan. Portland Public School District is in compliance with all State common core curricular mandates.

Portland Public School District plans to use funds from the EDU2011 program to provide mobile computing devices for 1,200 6th – 12th grade students as well as training for Teachers, Staff, Students and Parents.

Portland Public School District has implemented a new data warehouse program, iGor, which compiles data from State testing as well as District common assessments in order to direct school improvement efforts. This data will be the cornerstone of determining both program efficacy as well as areas for improvement.